

### REMARKS

Reconsideration and withdrawal of the rejection of all the claims now in the application (i.e. Claims 1-21) is respectfully requested in view of the foregoing amendments and the following remarks.

Applicant would like to thank the Examiner for his indication that claim 12 is allowable. Applicant has rewritten claim 12 to include all of the limitations of the claims from which it depends as new claim 21.

The Examiner rejected claims 1-11 and 13-16 as being anticipated by *Siebels* U.S. Patent No. 5,306,310. *Siebels* shows a pair of helical springs flooded to form a vertebral implant having a continuous slit. Applicant has amended the claims to distinguish over *Siebels* by either requiring that the end face which contacts the end plates of the adjacent vertebra have an outer curvature corresponding to the inner curvature of the vertebral end plates or is joined to and extends across the slotted wall. Because *Siebels* consists of two helical springs threaded together, the ends are open and therefore have no end faces. The end face 19 shown is not joined to the wall as clearly shown in *Siebels* FIG. 2. Obviously, the toothed end plate 19 is flat and does not have any outer curvature. The outer curvature is discussed in paragraph 26 of the application.

The Examiner also rejected claims 1-10 and 14-16 as being anticipated by *Beer et al.* U.S. Patent No. 5,458,642. The Examiner considered *Beer et al.* to teach a prosthetic intervertebral disc member having a series of springs spacing a pair of end plates and apparently considered only one of the springs such as 13E to anticipate the claimed invention. It would appear that the *Beer et al.* design has an outer elastomeric covering 14 which wall has no slits. Furthermore, the prosthesis has a polymeric core 12 which protrudes through the upper and lower plate openings into contact with the upper and lower vertebra. Thus, applicant does not agree that the outer wall of *Beer et al.* defines a helical slit even if one could consider 13E to have a solid exterior wall. Again, with regard to claims 1 and 17, there is no outer curvature to the end faces. In addition, with regard to claim 14, there is no end surface for contacting the end plates of adjacent vertebra having a perimeter joined to and spaced by a slitted outer wall.

The Examiner then went on to reject claim 14 as being anticipated by *Bagby* U.S. Patent No. 5,263,953. The Examiner considered that *Bagby* taught a disc member for insertion between adjacent vertebra having a substantially exterior wall defining a helical slit.

Applicant has amended claim 14 to include support surfaces for contacting the end plates of adjacent vertebra which are not taught or suggested by *Bagby*.

The Examiner then went on to reject claims 17-20 as being anticipated by *Rabbe et al.* U.S. Patent No. 6,344,057. The Examiner considered that *Rabbe et al.* taught an intervertebral prosthesis having upper and lower support surfaces connected by a substantial solid exterior wall including helical slits. Apparently, the Examiner considered the threads of *Rabbe et al.* FIG. 12 to be helical slits. Applicant has amended claim 17 to make it clear that its helical slits are deformable which is obviously different than a threaded surface. Furthermore, claim 17 has been amended to indicate that each of the end surfaces has an outer curvature corresponding to the curvature of the vertebral end plates. Thus, claim 17 as amended is not taught or suggested by *Rabbe et al.*

It is applicant's position that none of the references cited by the Examiner, taken alone or in combination, teach or suggest the structure of the amended claims.

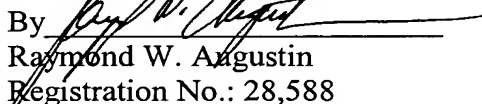
As it is believed that all of the rejections set forth in the Official Action have been fully met, favorable reconsideration and allowance are earnestly solicited.

If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that he/she telephone applicant's attorney at (908) 654-5000 in order to overcome any additional objections which he might have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

Dated: July 21, 2004

Respectfully submitted,

By   
Raymond W. Augustin  
Registration No.: 28,588  
LERNER, DAVID, LITTENBERG,  
KRUMHOLZ & MENTLIK, LLP  
600 South Avenue West  
Westfield, New Jersey 07090  
(908) 654-5000  
Attorney for Applicant